A8825-1
1/24/89

SECURITIES INDUSTRY ASSOCIATION

TRENDS

An Analysis of Emerging Trends in the Securities Industry

Produced by the SIA Research Department

Vol. XV, No. 1 January 6, 1989

THE SUPPLY OF AND DEMAND FOR SECURITIES

AN OVERVIEW OF THE 1980s

Highlights

1. The stock market's slump has persisted since October 1987 despite a sharp reduction in the supply of equities outstanding and amidst the second longest expansion in U.S. postwar history. This paper reviews the broad trends in the supply of and demand for securities by investor sector in order to add insight to the current state of our capital markets.

2. In the period 1980 through the first nine months of 1988, there was a sharp shrinkage in the amount of equities outstanding -- $275.4 billion, and an explosion of debt issuance -- $849.4 billion of corporate bonds and $2.2 trillion of government securities. Thus, while the value of equities just about equaled the value of government and corporate debt outstanding in 1980, equities outstanding measured only 69% of government and corporate debt by 9/30/88.

3. Despite the increased supply of fixed income securities, particularly after 1983, nominal interest rates trended downward after 1982 as monetary policy eased, except for a surge in 1984. Nevertheless, the increased supply of bonds kept real interest rates relatively high, attracting funds to fixed income products.

4. Private pension funds, traditionally viewed as the largest buyers of equity, shifted to a net selling position well before the 1987 crash. Net sellers of $8-$9 billion of equities annually in 1985 and 1986, these investors sold a net of $28 billion in 1987 and divested equities at about the same pace in 1988.

ANNUAL SUBSCRIPTION
$60.00 members • $96.00 non-members

Securities Industry Association • 120 Broadway, New York, N.Y. 10271 212•608•1500

5. Mutual funds, also considered large purchasers of equities, were actually not significant buyers in the 1980s until 1986 and 1987, when net purchases averaged over $20 billion annually. These investors were selling at an annualized pace of $18 billion in 1988.

6. As a whole, based on annualized data, institutional investors were net sellers of equities of almost $20 billion in 1988 for the first time in the 1980s. In contrast, institutional investors have steadily increased their allocation of funds to credit market instruments over the 1980s. Annualized data show record purchases of corporate bonds in 1988, $124.5 billion.

7. Unless the traditional buyers of equities return to the market or interest rates decline sharply, the price of equities will not reflect the improved profit picture except for those companies that are takeover candidates.

INTRODUCTION

Since October 1987, the stock market has failed to shake lower volume and prices. The stock market's slump has persisted despite a sharp reduction in the supply of equities outstanding and amidst the second longest expansion in U.S. postwar history. The expansion has lasted 74 months, with GNP growing by about 30% through December 1988. The longest post World War II expansion started in February 1961 and lasted through December 1969, or 107 months. During that time, real GNP increased 46.5% compared to about 30% through 1988 for the current expansion. In other words, in economic terms, there's a ways to go to break the record.

In this overview, we will rely on a Flow of Funds analysis in attempting to explain broad trends leading to the current state of our capital markets. Such analysis shows how investors have changed their savings and investment patterns in the 1980s while broad new policies on dereguiation, price competition, free trade and lower marginal tax rates, have been put in place. Over the same time, there have been occasional episodes of marked uncertainty as stalemates developed between the Administration and Congress over these policies and other issues, particularly the budget. We will also look at how issuers of securities changed over the 1980s.

THE SUPPLY OF SECURITIES

The withdrawal of equities from the marketplace has continued for five consecutive years, starting in 1984 when $65 billion was withdrawn. These withdrawals or retirements resulted from acquisitions, share repurchases and leveraged buyouts. In contrast, corporate bond issuance has risen steadily, jumping dramatically after 1983. Table 1 shows the net value of equities withdrawn from the market since 1980, a total of $275 billion, the net issuance of corporate bonds, about $849 billion, and the net issuance of federal government bonds, $2.2 trillion.

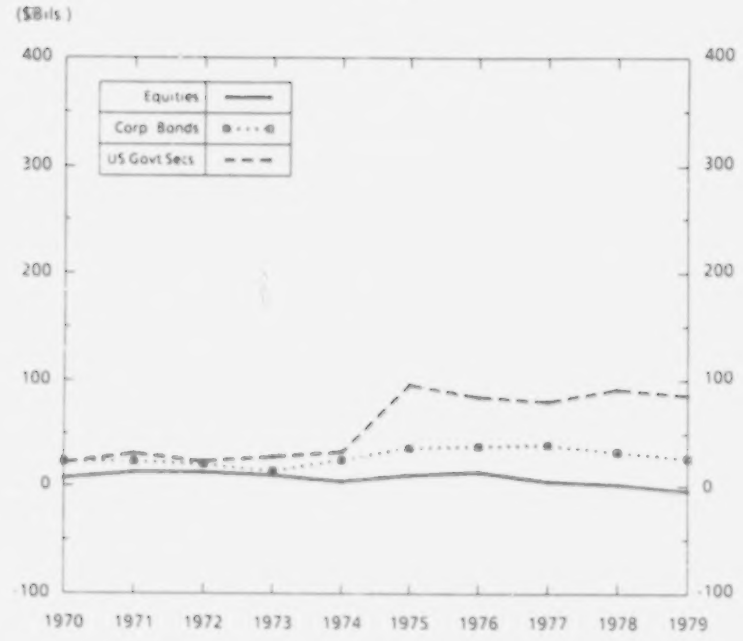
Table 1

The Supply of Securities
($ Billions)

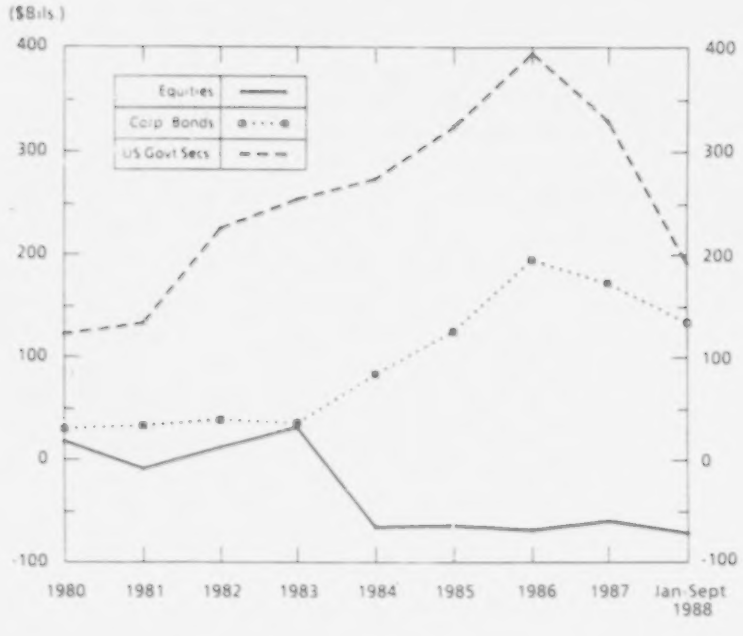
	Net Equity Retirements	Net Issuance of Corporate Bonds	Net Issuance of U. S. Governments
9 mos. '88	$(70.9)	$134.0	$191.8
1987	(59.0)	173.8	330.4
1986	(68.0)	195.2	393.5
1985	(64.3)	125.4	324.2
1984	(65.3)	83.0	273.8
1983	30.8	36.4	254.4
1982	12.4	38.4	225.9
1981	(8.5)	32.7	133.0
1980	17.4	30.5	122.9
Total	$(275.4)	$849.4	$2,249.9

Source: Flow of Funds Accounts, Third Quarter 1988 with Annual Revisions, Federal Reserve Board

NET ISSUANCE
1970s



NET ISSUANCE
1980s



As discussed extensively in the financial press, the government deficit ballooned in the 1980s. The deficit passed the $200 billion mark in 1982 and more or less deteriorated over the next few years until subsiding to $150 billion in 1987. These growing deficits are reflected in Table 1, which shows the annual borrowing through U. S. government securities. Until 1986, the value issued increased every year and, although there was slight improvement in 1987, the deficit and other factors still added well over $300 billion to the public debt. Thus, Federal government securities as well as corporate bonds contributed to a dramatic increase in the supply of fixed income securities available in the marketplace.

The value of equity outstanding in the U. S. was almost equal to government and corporate debt outstanding at year-end 1980, about $1.6 trillion each. Subsequently, the increase in total government and corporate bond debt outpaced the increase in equity outstanding. U. S. Treasuries, the largest component of government debt, escalated from $737.8 billion at year-end 1980 to over $2 trillion by September 1988. Corporate bond debt jumped from almost $500 billion at year-end 1980 to $1.3 trillion by September 1988. Thus, the balance tilted towards greater debt. At the end of September 1988, equities outstanding measured about 69% of government and corporate bond debt. Looked at through another perspective, since the end of 1980, U. S. equities outstanding have increased in value by about 96%, government debt by 176%, and corporate bonds by 166%.

Based on the supply of fixed income securities alone and ignoring the demand for these instruments, we would expect that interest rates would rise because of the sharp increase in fixed income securities, both public and private, issued into the marketplace. Interest rates are simply the cost of obtaining funds for a period of time. Thus, if more borrowers seek funds, the cost of obtaining funds or interest rates should rise, other things constant.

Clearly, this explanation is an oversimplification of only one of the factors affecting interest rates. Although the supply of fixed income instruments impacts the level of interest rates, it is also true that interest rates affect the supply of bonds. The Federal Reserve's monetary policy affects the cost of money or interest rates, which, in turn, influences the private sector's demand for money and its willingness to supply funds. Thus, although the supply of fixed income instruments increased noticeably after 1983, nominal interest rates trended downward after 1982 except for a temporary surge in 1984. That is, the Federal Reserve eased monetary policy after the inflation threat was erased from the economy.

Nevertheless, the increased supply of bonds has been reflected, in our opinion, in terms of real, if not nominal, interest rates. Real interest rates (interest rates less inflation) did not actually "improve" or decline until late 1986 and 1987. Hence, the supply of fixed income securities affected interest rates by keeping real rates higher than they otherwise would be despite a literally flat annual change in the CPI from 1982-1985.

In the case of U. S. equities, $275 billion was retired by one method or another from 1980 through the first nine months of 1988. This was equal to over 7% of the value of equities outstanding in the U. S. just before the crash in October 1987 and equal to 9% of the value of equities at September 30, 1988, about $3.1 trillion. By itself, the dwindling supply of equities in the 1980s would lead to higher equity prices, other things constant.

Indeed, the stock market boomed from mid-1982 through October 1987 (the value of equities increased from $1.7 trillion at year-end 1982 to $3.8 trillion at 9/30/87). Since the crash, however, the market has languished with P/E ratios equal more or less to the historic norm of 12-13 and stock prices 20% or more below their 1987 peaks. The failure of the market to stage a strong recovery is surprising, given a diminishing supply of equities, an expanding economy and a 30% gain in corporate profits projected for 1988.

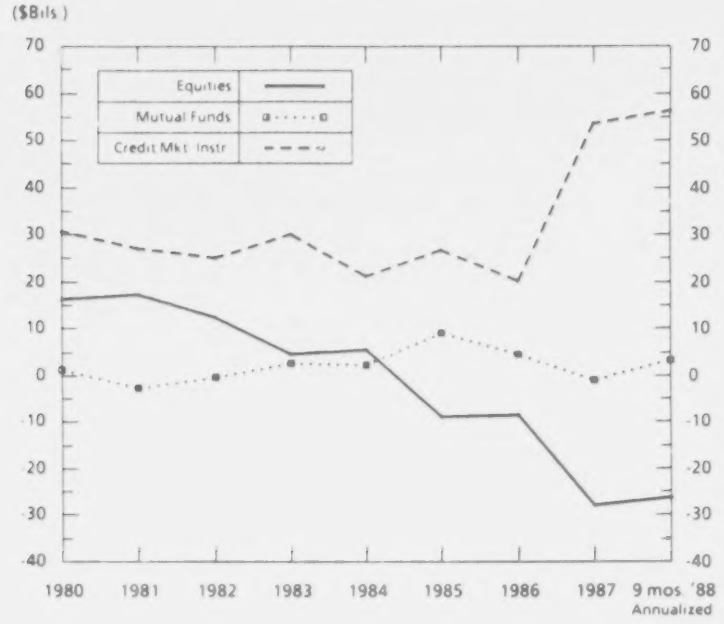
Trends in the economy alone cannot explain completely the lackluster stock market. However, attractive nominal and real interest rates serve as a magnet for attracting investment to fixed income securities rather than stock. It is possible that this factor, along with shifts in investment patterns by investor sectors, will shed light on why equity prices soared as they did until October 1987 and have slumbered ever since. An analysis of changing patterns of investment by different sectors should provide valuable insight into explaining today's capital markets.

THE DEMAND FOR SECURITIES

Private Pension Funds

The 1980s saw a definite shift in the investment pattern of private pension funds. Buyers of about $15 billion of equities annually from 1980-1982, these investors swung to net sellers well before the 1987 crash, making net sales of between $8-$9 billion of stock annually in 1985-86. In 1987, private pension funds sold a net of $28 billion of equity, and in 1988 they are selling at a pace that almost matches the 1987 level. Surprisingly, similar to the household sector (households, personal trusts, and non-profit organizations), they started to institutionalize their equity purchases in 1983. Even while selling equities directly in 1985 and 1986, these funds purchased $9 billion and $5 billion of mutual fund equity shares in 1985 and 1986, respectively. Moreover, during the first nine months of 1988, while still selling large amounts of equity directly, pension funds were "nibbling" at mutual fund equity shares.

NET ACQUISITIONS BY PENSION FUNDS



Private pension funds acquired between $20-30 billion annually of credit market instruments from 1980 through 1986. Acquisition of these instruments was stepped up dramatically in 1987 and purchases have remained at the higher plateau in the first nine months of 1988. Surprisingly, there has been only a modest increase in purchases of government securities despite the well reported "flight to quality" theme since the stock market crash. Recent acquisitions of government securities by pension funds are in line with that of the early 1980s. However, acquisition of corporate and foreign bonds has accelerated notably in 1987 and during the first nine months 1988, running at a rate 3 times greater than that in the 1983-1985 period. In addition, there has been a surge of interest in time deposits since 1986, which at $16.6 billion for 1988 annualized would be at the peak for the 1980-88 period.

In sum, the major surprise in a review of the investment preference of private pension funds in the 1980s was the swing out of direct equity investments years before the crash, at a time when the market was steadily rising. Traditionally viewed as the largest net buyer of stock in the U. S., these funds started cutting back on such purchases after 1982. Their net selling in 1985 and 1986 was not consistent with the bull market trend, although equity mutual funds came into vogue with these investors at that time. Nevertheless, the large equity sales by pension funds in 1987 and through the first nine months of 1988 significantly weakened the demand for equities. Apparently, corporate bonds have been perceived as a way of obtaining double digit returns with relatively limited risk (the threat of "event risk" became a common theme after the 2Q88).

State & Local Government Retirement Funds

State and local government retirement funds reduced their purchases of corporate equities by 75% in the 4Q87 and increased their allocation of funds to credit market instruments. After averaging $8.3 billion in the first three quarters, equity purchases by these investors dropped to $1.6 billion in 4Q87. In comparison, credit market purchases, which were at a $3.8 billion average pace in the first three quarters, increased to $13.2 billion. In the first nine months of 1988, these investors returned to the equity market but with a distinctly cautious stance. Annualized 1988 net equity acquisitions were only $19.2 billion, compared with $26.4 billion in 1987.

Credit market instruments are back in favor with these investors, particularly corporate bonds. On an annualized basis, these investors are acquiring $42.5 billion of credit instruments in 1988 compared with $26.3 billion in 1987. Of note, at $28.4 billion annualized, net purchases of corporate bonds compare with the previous high of $11.5 billion in 1984. On the other hand, the acquisition of government securities annualized would be only $13.7 billion, the lowest amount since $12.3 billion in 1985.

In general, with the exception of $20.0 billion of net acquisitions in 1983, these investors did not show a "big" interest in equities until 1985. Net purchases in 1985-1987 were about $26 billion annually, or about half of total net acquisitions of financial assets. In contrast, in the early 1980s, over three-fourths of net acquisitions were credit market instruments, with a strong preference for government securities.

Thus, the investment behavior of these funds sheds little light on the mediocre performance of the stock market. State and local retirement funds have been active and relatively large equity buyers since 1987. Despite a modest waning in net purchases in 1988 (annualized), these investors appear to be raising the proportion of their total financial assets allocated to equities and this strategy has buoyed the stock market somewhat.

Life Insurance Companies

Life insurance companies were net purchasers of $1.4 billion of equities in the 4Q87 in contrast to net sellers of $0.6 billion in 3Q87. In terms of credit market instruments, these investors were purchasers of $21.7 billion compared with $28.1 billion in the 3Q. In general, the crash appears to have had little impact on their investment pattern. Moreover, their net acquisitions of equities ran at a $3 billion annualized rate during the first nine months of 1988, a level not strikingly different than their annual purchases during the 1980s.

Life insurance companies' acquisitions of financial assets grew steadily from 1980, reaching a peak in 1986 before probably increasing again in 1988. However, most of the time, purchases were directed to credit market instruments. Until 1984, life insurance companies split their allocation to credit market instruments almost equally between government securities and corporate bonds. After 1984, acquisitions of corporate bonds shot past that of government securities, becoming particularly heavy in 1987 and the first nine months of 1988. We believe that these investors acquired lower grade instruments in seeking to retain double-digit yields.

Credit market instruments, especially corporate bonds, are the traditional preference of these investors. In 1984, government securities comprised 43% of their purchases of credit market instruments. This percentage dropped to 30% in 1985; 21% in 1986; and less than 6% in 1987. Annualized nine months 1988 data show government securities rising modestly to 16% of credit market investment.

Other Insurance Companies

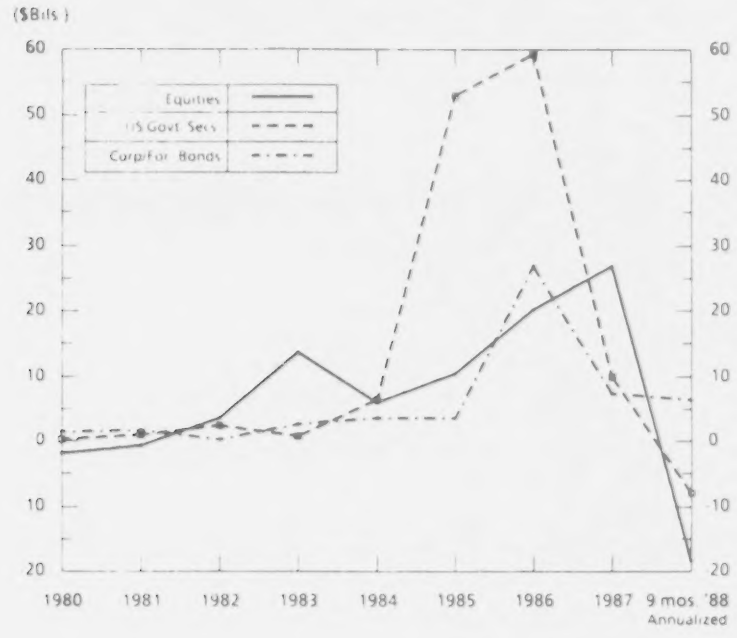
Similar to the larger category of life insurance companies, the investment pattern by these institutions remained unchanged during 4Q87 and first nine months of 1988. Over the 1980-87 period, these investors showed minimal interest in equities, making net acquisitions annually of $2-$3 billion in 1980-83 and net divestitures of $2-4 billion annually in 1984-86. Annualized nine months 1988 data shows a pickup in equity acquisitions to $3.0 billion compared with $1.5 billion in 1987.

Open-End Investment Funds

After being almost deserted by investors in the early 1980s, mutual funds enjoyed a burst of popularity which made this group among the largest acquirers of financial assets in the mid-1980s. Mutual funds acquired less than $25 billion of financial assets annually prior to 1985 but, with their return to favor, annual net purchases by these funds jumped to $81 billion in 1985 and almost $146 billion in 1986. Financial assets acquired by this group, however, plummeted to $53 billion in 1987 and will literally disappear, on an annualized basis, in 1988.

Contrary to common perceptions, most mutual fund purchases of financial assets are in credit market instruments. Only in 1986 and early 1987 did mutual funds' acquisitions of equities approach over $20 billion annually. In effect, the "bloom time" for mutual funds was 1985 - 1H87. By acquiring over $20 billion of equities in 1986 and almost $30 billion during the first three quarters of 1987, mutual funds boosted the demand for equities and stock prices significantly. Mutual funds swung to net sellers of equities during the 4Q87 and this pattern continued at an annualized $18 billion clip during the first nine months of 1988.

NET ACQUISITIONS BY OPEN-END INVESTMENT COS. (MUTUAL FUNDS)

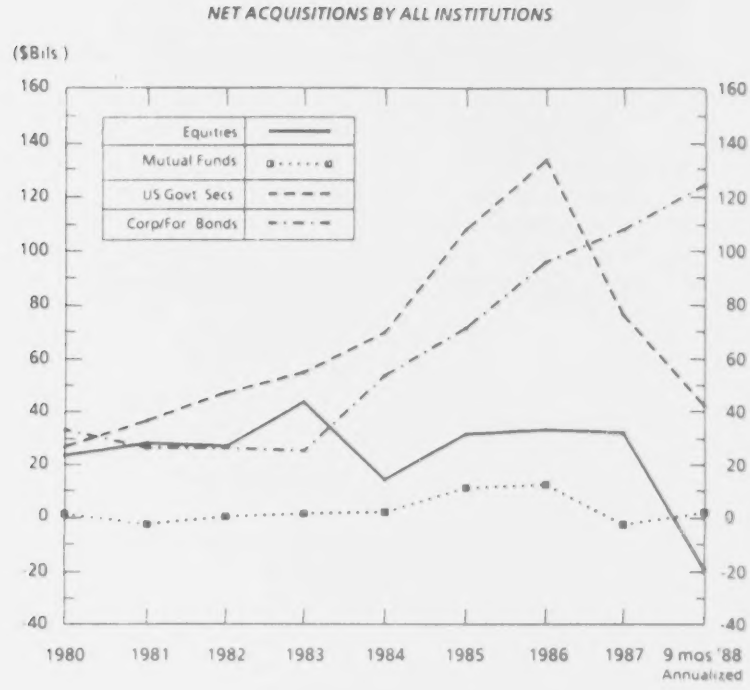


It is not well known that mutual funds were important buyers of government securities in 1985 and 1986, acquiring almost $53 billion and $60 billion, respectively. Recently, with the creation of many high-yield funds, mutual funds have become important buyers of corporate bonds. They purchased almost $27 billion of corporate bonds in 1986. Thus, open-end mutual funds were important factors to the U. S. capital markets in the mid-1980s. Their growth helped lower interest rates and added to the demand for equities while the supply was contracting.

All Institutions

Over the 1980s, the acquisition of financial assets by institutional investors (those covered in the preceding sections) rose dramatically as funds under management by these investors grew. Total purchases of financial assets increased from $132.0 billion in 1980 to a peak of $378.1 billion in 1986 before waning to $272.1 billion in 1987. Annualized first nine months data put acquisitions at $258.9 billion in 1988.

From 1980 to 1984, purchases of equities by these investors bounced from an average of over $26 billion in the first three years of the period, to a peak of $43.7 billion in 1983, and to a trough of $14.6 billion in 1984. From 1985-1987, institutional investors were net acquirers of over $30 billion of equities annually, giving a significant boost to equity prices as the supply of stock began to wane sharply.



Institutional investors' appetite for credit market instruments grew steadily from 1980 to a peak of $305 billion in 1986. Net acquisitions of government issues doubled from 1980 to 1983, and again from 1983 to 1985. After a hefty increase in 1986, institutional purchases of governments waned in 1987. Institutional investors' taste for corporate bonds heated up in 1984 and continued strong through the first nine months of 1988. Indeed, net acquisition of corporate bonds is now at a pace 1.75X the rate of 1985 which, in turn, was almost three times higher than 1983.

Summing up institutional investment behavior, these investors increased their holdings of financial assets steadily from 1980 until 1987. Importantly, even this sector's main buyer of equities, mutual funds, acquired more fixed income instruments than equities. Even compared to the peak in 1983 for institutional net purchases of equities, acquisition of credit market instruments by institutions has always been higher. In 1988, with the largest traditional institutional purchasers of equities -- private pension funds and mutual funds -- deserting this market, institutional investors are selling $19.4 billion of stock.

Foreign Investors

Foreign investors' interest in U. S. equities came into its own in the early 1980s and gathered momentum in 1986 and 1987 -- until the fourth quarter. Foreign investors were accumulating U. S. equities at a record-setting pace in the first three quarters of 1987 -- with $23 billion already breaking 1986's record of $17.8 billion. During 4Q87, foreign investors turned homeward bound to the tune of net sales of $7.8 billion of U. S. equities. And so far, they haven't seen much reason to come back. Net purchases totalled a modest $1.3 billion through the first nine months of 1988. Nevertheless, these investors have kept the same relative equity proportion of

their total U. S. financial asset holdings over the 1980s -- about 16%. Still, total foreign holdings of U. S. financial asset holdings spurted 208% from 1981 to 3Q88.

While foreign investors kept basically the same equity allocation over time, there was a distinct shift in fixed income allocation. Government securities were the mainstay of foreign investment in the early 1980s, comprising 38% of total financial asset holdings in 1981. That proportion ebbed to 30% as of the 3Q88, as funds appear to have been shifted to corporate bonds which grew in relative proportion from 8% in 1981 to 14% by 3Q88.

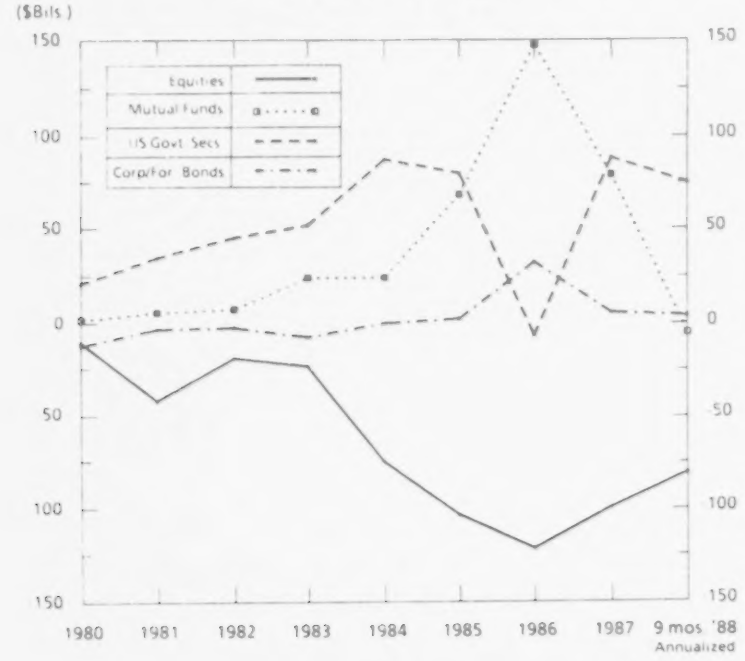
Since the crash, private foreign investors have shown renewed interest in governments, with net acquisitions of $18.5 billion through 3Q88. On the other hand, interest in corporate bonds which averaged over $6 billion quarterly for the first three quarters in 1987, dipped to $1.4 billion in the 4Q87, before recovering to $7.0 billion in the 3Q88.

Households

Much can be said about the household sector in the Flow of Funds analysis. This group includes individuals as well as trusts and non-profit organizations. But, because the household sector is a residual category, the numbers are suspect. Nevertheless, there are certain clear trends even if one doubts the accuracy of the specific data.

Individuals were sellers of direct stock in the 1980s, while increasingly being attracted to mutual fund equity shares, particularly during 1985-1987. Money market mutual funds waned in popularity as time deposits became increasingly attractive, notably after 1982 with the deregulation of interest rates. Overall, households' acquisition of financial assets tailed off after 1986. In 1988, these investors continued to sell equities, including mutual funds. Meanwhile, government and municipal securities appeared to receive funds shifted away from corporate bonds.

NET ACQUISITIONS BY HOUSEHOLDS



Of all the investor sectors, this category has shown the greatest penchant to follow the "flight to quality" theme, showing the most concern about risk. This preference is consistent with their surge in holdings of time deposits and large acquisitions of government and municipal securities in lieu of equities and corporate bonds. Indeed, except for some "suspicious" figures for 1985 and 1986, these investors consistently sold corporate securities while financial assets were being accumulated.

There is some tendency for the household sector to decline in relative importance compared to the institutional sector, insofar as the acquisition of financial assets is concerned. In 1980, the household sector acquired 64% of the total financial assets acquired by both these sectors that year. This percentage peaked at 68% in 1984, declined in 1985, and bottomed out at 51% in 1986. Surprisingly, the household sector's percentage of total financial assets acquired rebounded in 1987 to 56% and increased to 60% through the first nine months of 1988.

While the household sector's acquisition of financial assets slowed in 1986, the institutional sector's acquisitions increased through 1986. Since then, both sectors have acquired financial assets at a reduced pace. The household sector's acquisition rate of financial assets has dropped to below 1984 levels and the institutional sector's rate, below 1985 levels. These aggregate patterns of financial asset accumulations investment are consistent with the plunge in the economy's savings rate after 1984 and the continued low rate of recent years.

CONCLUSION

A host of factors were at work in the 1980s to bring our capital markets to their current state. While October 1987 will serve as the focal point for many reviews of the decade, there were changes underway long before the crash in both the supply of securities coming into the marketplace and the demand for these securities.

The supply of and demand for securities by investor sector during the 1980's sheds some light on price trends during this decade. Despite the shrinkage in the supply of equities since 1984, the demand for these securities remained strong and even strengthened for several investor sectors during the 1980's at least up until the crash. However, attractive real interest rates moderated the demand for equities while spurring the demand for fixed income instruments by different investor sectors.

Given the greater risk perceived by investors for equity since October, 1987, attractive real interest rates have kept fixed income instruments in a very favorable light. Indeed, the data indicate that traditional buyers of equities have avoided these investments or have suffered from decreased inflows. Unless certain investor sectors see equities in a different light or interest rates decline significantly, the price of equities will not reflect the improved profit picture except for those companies that are considered prime takeover candidates.

Jeffrey M. Schaefer
Senior Vice President &
Director of Research

Carolyn Hildebrandt
Assistant Vice President &
Director of Macroeconomic
Studies

Grace Toto
Research
Assistant

VOLUME

	NOV 1988	YTD 1988	NOV 1987	YTD 1987	% CHAN YTD 1988-1987
AVERAGE DAILY SHARE VOLUME ON					
NYSE (MILS.)*	134.4	163.9	179.5	189.6	-13.6%
AMEX (MILS.)*	8.5	9.9	11.3	13.9	-29.0%
NASDAQ (MILS.)*	108.9	123.1	126.0	150.9	-18.4%
REGIONAL EXCHANGE (MILS.)*	21.8	23.3	23.4	27.6	-15.6%
DOLLAR VALUE OF SHARES TRADED ON					
NYSE (MILS.)	$96,467	$1,264,849	$113,700	$1,759,784	-28.1%
AMEX (MILS.)	1,772	29,466	2,517	48,352	-39.1%
ODD-LOT SHARES PURCHASED ON NYSE (THOUS.)	6,803	79,029	9,025	124,091	-36.3%
ODD-LOT SHARES SOLD (INCLUDING SHORT SALES) ON NYSE (THOUS.)	15,975	165,197	11,829	191,627	-13.7%
NYSE BLOCK VOLUME AS A PERCENT OF TOTAL SHARES TRADED	49.6%	52.8%	51.1%	51.4%	----
CONTRACTS TRADED (THOUS.)					
CBOE OPTIONS	11,292	103,479	7,276	171,116	-40.2%
AMEX OPTIONS	2,879	34,841	2,652	49,855	-30.1%
COMMODITY	22,768	227,791	16,871	212,139	7.2%

*MONTHLY AVERAGE
N/A - DATA NOT AVAILABLE

PRICES
(END OF MONTH)

	DEC 1988	DEC 1987	% CHAN NOV 1988-1987
DOW JONES INDUSTRIALS	2168.57	1938.83	11.85%
STANDARD & POOR'S 500	277.72	247.08	12.40%
NYSE COMPOSITE	156.26	138.27	13.04%
AMEX MARKET VALUE INDEX	306.01	260.35	17.54%
VALUE LINE COMPOSITE	232.68	201.62	15.41%
NASDAQ COMPOSITE	381.38	330.47	15.41%

YIELDS

(MONTHLY AVERAGES)

	SEPT 1988	SEPT 1987	BASIS POINT CHG 1988-1987
BOND BUYER INDEX (20 BOND)	7.66%	8.26%	(60)
CORPORATE BOND YIELDS (MOODY'S)			
Aaa CORPORATE	9.82	10.18	(36)
Baa CORPORATE	10.90	11.31	(41)
RATIO Aaa CORPS. TO Baa CORPS.	0.90	0.90	0

UNDERWRITING

	1988	1987	% Change 1988-1987
CORPORATE FINANCING (Gross New Issues - $ Mils)			
TOTAL	$275,370.0	$272,381.3	0.4%
Common Stock	$29,600.1	$41,673.5	-29.0%
# of Common Stock Issues	419	856	-51.1%
Preferred Stock	$7,309.8	$10,620.2	-31.2%
# of Preferred Stock Issues	123	151	-18.5%
Corporate Debt	$236,460.1	$220,087.9	7.4%
# of Corporate Debt Issues	3,075	2,383	29.0%
MUNICIPAL FINANCING (Gross New Issues - $ Mils)			
Negotiated	$85,310.8	$77,010.7	10.8%
# of Issues	3,641	3,508	3.8%
Competitive	$26,686.5	$23,934.1	11.5%
# of Issues	3,526	3,497	0.8%

Source: IDD Information Services

RECENT INTERESTING READING AND STATISTICAL MATERIAL

Item	Description	Source
"The 1988 Financing Rankings"	League tables for 1988 underwritings. Rankings cover domestic corporate underwritings of convertible debt, straight debt, preferred and common stock, IPOs, asset-backed and mortgage-backed bonds, rankings by industry sector and largest deals of 1988; international underwritings cover Eurobonds, worldwide offerings, international equities, and foreign bonds; municipal underwritings cover negotiated and competitive issues, general obligation and revenue bonds, public purpose, variable rate and refunding issues.	Investment Dealers' Digest 1/9/89
"Money Management Forum"	Special edition of "Institutional Investor" magazine covering over two dozen articles on money management topics ranging from portfolio insurance, LBOs, investment strategies, etc., to high yield bonds, international investing, tactical asset allocation, etc. Also includes sections on money management prepared by nine money management sponsors including Merrill Lynch, Chase Manhattan Bank and Nomura Investment Management Co.	Institutional Investor Volume Two December 1988
"Rookies of the Year"	This special issue of "Registered Representative" magazine profiles eight new brokers, their backgrounds and prospecting strategies. Light, but fun, reading, the rookies profiled range from a woman in her mid-20s, a former resident of Taiwan and Chinese language student, who now is a broker in Bethesda, Maryland, and utilizes finance student interns from Washington, D.C. area universities, to a Florida broker who joined the business two years ago after 25 years of running his own business of importing garments from Brazil.	Registered Representative January 1989

Item	Description	Source
"Deals of the Year"	This seven-page article highlights several deals which point up trends in international corporate finance which will stand out in 1989. These deals show financing techniques used in both short-term and long-term debt financing, hedging, international equity and mergers and acquisitions.	Corporate Finance "Euromoney" December 1988
"Tax Options for 1989: Revising Capital Gains Rates"	Author reviews political sentiment and options for a lower captial gains tax in 1989 and concludes the only chance for a cut may be to combine it with other tax changes that have a broad political appeal. Among the options discuss: a sliding scale for capital gains to discourage LBO-related activity; a reduction in the capital gains rate with a broad exemption on home sales; tax only the inflation component of asset sales; and raise tax rates on ordinary income for wealthy taxpayers while lowering the rate on capital gains. Article also briefly summarizes the history of capital gains taxation and the debate over the revenue effect of lower capital gains rates.	Congressional Quarterly 12/10/88
"Japanese Finance Survey"	In-depth, 32-page survey of the changing Japanese financial system. Following the removal of foreign-exchange controls in 1980, deregulation gained momentum, with the main impetus being the loss of banks' profitability. The banks new aggressiveness set off a chain reaction and all financial institutions started pressing for access to new business. The result has been a blurring of the distinction between different sorts of financial bussinesses that has yet to be arbitrated and settled. Article also reviews cultural and economic components of the evolution of the financial system.	The Economist 12/10/88

A88 25-1
3/21/89

SIA SECURITIES INDUSTRY ASSOCIATION

TRENDS

An Analysis of Emerging Trends in the Securities Industry

Produced by the SIA Research Department

VOL. XV, NO. II March 16, 1989

Back To The Future: An Update on SIA's Investor Activity Report

In the July 31, 1985 issue of Securities Industry Trends, the author posed the following question: "To what extent does the public participate in the stock market?" That issue of Trends introduced a new SIA publication, Investor Activity Report (IAR), which went a long way toward answering this question, indicating that the level of retail activity was substantially understated due to the past use of proxies.

Now, three and a half years later, new stock trading techniques and strategies have altered the accuracy, and therefore the conclusions, of the data reported in SIA's IAR data. However, the question over the size of public participation in the market is still an often asked one, particularly in light of the October 19, 1987 crash which seemed to dissuade this sector from participating in the equity markets as they had in earlier periods.

Therefore, this issue of Trends will serve three purposes. First, to review the past methodology and results. And second, to discuss, what we believe to be, inaccuracies in the data and to refine the numbers utilizing data available from the New York Stock Exchange. Finally, to note some implications of the declining role of the individual investor.

Past Attempts at Determining Retail Participation

In the past, two completely different methodologies have been used to determine retail participation in the U.S. equity markets (for a lengthier discussion see the 7/31/85 issue of Trends; this will only be a brief summary). Approximations for the institutional/retail mix has come from periodic statistical samplings of trades at NYSE member organizations, or by using data on reported trades by order size as rough proxies.

ANNUAL SUBSCRIPTION
$60.00 members • $96.00 non-members

Securities Industry Association • 120 Broadway, New York, N.Y. 10271 212•608•1500

The New York Stock Exchange employed statistical sampling to provide estimates through its Public Transaction Study (PTS). All NYSE member firms doing a public business participated, and firm data were collected for from one to five trading days before being expanded to represent aggregate share volume for the fourth quarter of 1980 for the entire NYSE member firm community. Share volume included all agency trades executed by NYSE member organizations on U.S. stock exchanges and the OTC before being expanded to represent aggregate share volume for the fourth quarter of 1980 for the entire NYSE member firm community. Share volume included all agency trades executed by NYSE member organizations on U.S. stock exchanges and the OTC market. It is likely that accounts which could not be clearly identified by member firms as retail became tabulated as institutional for PTS purposes. For this and other reasons, the sampling technique used probably underreported retail participation.

The results of the last PTS covering the fourth quarter of 1980 and prior periods were:

Table 1

	Proportion of NYSE *Publicly* Traded Share Volume		Proportion of *Total* Share Volume		
	Institution	*Retail*	*Institution*	*Retail*	*Member Trading*
4Q 1980	64.9%	35.1%	47.4%	25.7%	26.9%
1Q 1976	57.3	42.7	44.5	33.2	22.3
1Q 1974	58.9	41.1	44.6	31.1	24.3
1H 1971	59.7	40.3	45.7	30.8	23.5
FY 1969	55.9	44.1	42.4	33.4	24.2

Source: NYSE, Public Transaction Study, Fourth Quarter 1980, pp. 5 and 11.

It is clear from the Public Transaction Studies that there was an increase in the institutionalization of the marketplace from 1969-1980. Excluding member firm trading, institutions increased their share of public volume from 56% in 1969 to almost two-thirds by the fourth quarter of 1980. Correspondingly, individual participation plunged from 44% in 1969 to 35% 11 years later.

Including member firm trading, which has gradually risen in relative importance over time, the increase in the relative importance of institutions is considerably less dramatic, growing from 42% in 1969 to 47% by 1980. Meanwhile, individual participation on the NYSE shrunk from one-third of total volume in 1969 to slightly more than one-fourth of the total shares traded during the fourth quarter of 1980.

Since the fourth quarter of 1980, there have been no formal or comprehensive industry studies estimating the institutional and retail proportion of publicly traded share volume or total share volume (public trading plus member firm principal activities). So, those interested in determining retail share, have to a large extent relied on estimates based on reported trade size. For example, one proxy used as an indicator of retail participation is volume in transactions of 900 shares or less.[1]

---

[1] The NYSE has recently increased the maximum size of orders classified as small from 900 to 1000 shares.

Table 2

Orders of 100-900 Shares as a % of Total NYSE Trading Volume

1988*	12.6%
1987*	13.6
1986	10.8
1985	10.6
1984	11.3
1983	14.6
1982	16.2
1981	21.1
1980	24.7
1979	27.5
1978	30.2

*Orders of 100-1000 shares.

Source: NYSE

As seen in Table 2, small orders have fallen sharply in relative importance. Whereas they accounted for 30% of NYSE share volume in 1978, this percentage dropped to 12.6% by 1988. With the average trade size more than tripling from 559 shares in 1976 to 2,112 shares in 1988, the drop in importance of small orders is hardly surprising.

The wisdom of using orders of 900 shares or less as estimates of retail participation is questionable for several reasons. For one thing, individual transactions often occur in trades exceeding 900 shares. Indeed, data collected in the fourth-quarter 1980 PTS showed that only 49% of individual volume on the NYSE was included in trades of 900 shares or less while 51% was in trades exceeding 900 shares. Furthermore, nearly 11% of institutional volume was in trades of 900 shares or less. Consequently, estimates of NYSE retail share volume based solely on trades of 900 shares or less are inappropriate and sharply understate retail share volume. As average share order size increases by all customers, transactions in 900 shares on less become a poorer and poorer indicator of retail activity.

Table 3

Blocks of 10,000 shares and Over as a % of NYSE Volume

1988	54.5%
1987	51.2
1986	49.9
1985	51.7
1984	49.8
1983	45.6
1982	41.0
1981	31.8
1980	29.2
1979	26.5
1978	22.9

Source: NYSE

One of the major indicators of trading volume cited frequently to emphasize the increased institutionalization of the marketplace is blocks of 10,000 shares and over. As shown in Table 3, such blocks have increased dramatically in relative importance.

More recently, such trades accounted for over 50% of the volume on the NYSE. Blocks of 10,000 shares and over have been steadily growing in relative importance on the Exchange. However, there is a great deal of confusion over what this percentage includes. For example, such blocks include member firms trading for their own account. Consequently, blocks of 10,000 shares and over cannot be interpreted as reflecting purely increased institutionalization of the marketplace since a large share of member firm trading is included in such blocks. Indeed, some observers have estimated that member firms trading principal positions are responsible for 30%-40% of trading in blocks of 10,000 shares and over on the NYSE. Finally, there are instances where individual investors and small businesses account for blocks of 10,000 shares and over.

Genesis of SIA's Investor Activity Report

Several years ago, SIA's Firm and Industry Analysis Committee (FIAC) initiated a project to obtain accurate and comprehensive institutional and retail share volume data by marketplace. SIA funded this project because of its importance and interest to the industry and to observers of the securities markets.

The FIAC initiated project included by year-end 1984 a comprehensive universe of reporting broker-dealers and participating institutions. The data are processed and aggregated by the Depository Trust Company with the cooperation of other depositories for SIA's use. The Association's Research Department has been compiling and analyzing the data in reports to describe trends in trading activity starting in May, 1985.

This new database, has produced the following results:

	Proportion of NYSE *Publicly* Traded Share Volume		Proportion of *Total* Share Volume		
	Professional Institution	*Retail*	*Professional Institution*	*Retail*	*Member Trading*
1988	50.2%	49.8%	38.8%	38.5%	22.7%
1987	55.9	44.1	41.1	32.5	26.5
1986	58.6	41.4	42.3	29.9	27.8
May-Dec 1985	61.1	38.9	45.3	28.9	25.8

Results of the data in the first two years showed the retail sector's proportion of NYSE share volume to be significantly higher than estimates based on proxies, such as trades of 900 shares or less. This conclusion should come as no surprise since both fourth quarter 1980 PTS data and current individual firm data reveal that a large proportion of retail share volume occurs in trades exceeding 900 shares.

However, increases in retail volume in 1987 and 1988 began to make the data look suspicious. That individuals should account for nearly 40% of total NYSE share volume in 1988, while an RRs dream, was clearly not in conformity with any "real world" analysis.

Food For Thought

Before focusing on what we believe to be the problem with the data, we will review the methodology by which we derive the data used in the IAR.

As noted previously, the institutional data are processed and aggregated by the Depository Trust Company through the Institutional Delivery System (ID). Institutional share volume is reported for all deliver-versus-payment and receive-versus-payment transactions, which includes almost all institutional volume. Despite NYSE Rule 387, which requires institutional trading to go through the ID system, we estimate that, perhaps, 3% of institutional transactions are not processed through the ID system.

Member principal trading information is filed weekly with the NYSE on Form 121, which requires that any round-lot purchase or sale of stock effected on the floor of the NYSE for members, allied members, or member organizations be reported regardless of where the order originated or by whom it was executed. The AMEX has an identical reporting requirement.

The retail trading figures are estimated after institutional activity and member firm trading are subtracted from the aggregate trading figures; in effect, the retail category is a residual. To the extent that institutional transactions are not captured in the Institutional Delivery System, it will be classified as retail/residual using our methodology, and therefore lead to an overstatement of the retail figure and a corresponding understatement in institutional activity.

The results which this methodology produced for 1987 were suspicious; retail activity trended upward throughout 1987 and then accelerated following the October 19, 1987 crash. In light of the increasing role of program trading, dividend capture plays, and corporate buy-back strategies in 1987, and an even greater role in 1988, SIA examined how transactions for these trading techniques and strategies were captured in the current reporting mechanism. Upon inspection, it was determined that in many cases, whether done for an institution or member firm, that most of this data was not reported through the ID system or on Form 121. Therefore, such data was captured in the retail/residual activity and overstated the activity of these investors.

For example, dividend capture plays grew from 3.3% of NYSE daily volume in 1987 to 10.1%, on average, in 1988. In addition, we assume that program trading averaged 10.6% of NYSE volume in 1987 and 1988, based on public NYSE program trading data for July-December 1988. We believe that all dividend capture activity and three-fourths of program trading activity falls in the retail (residual) category due to reporting drawbacks, and in good part accounts for the increased percentages being reflected by this category.

Methodology For Determining Adjusted Numbers

To get a more refined estimate of participation of retail investors, we eliminated certain factors from the residual category which are far removed from retail activity. With the exception of corporate buybacks, these components were distributed between the institutional and member firm categories according to our best estimates. Based on our adjustments, retail activity dropped to 18.2% of total NYSE volume in 1988 from 19.7% in 1987.

All dividend capture activity and a portion of program trading, amounting to about 4.5% of average daily NYSE volume, were shifted to the institutional category. In addition, about 3% of institutional activity which does not go through DTC's ID system was reallocated from the residual category to the institutional category. These adjustments put institutional activity at 54.6% of the total in 1988, compared with 50.1% in 1987. The remainder of program trading, 3.5% of daily volume, was shifted to the member trading category. Adjusted figures show member trading at 26.2% of volume in 1988 and 30.0% of volume in 1987. Corporate buybacks, 800,000 shares daily in 1987 and 3.5 million shares daily in 1988, were eliminated from our residual and not distributed to any of the three sectors discussed in our paper.

Average Daily Adjusted Activity
(Millions of Shares)

	1987	1988
Total	378.4	323.9
Retail & Other Activity	122.8	124.7
-Dividend Capture	12.6	32.8
-Program Trading	30.1	25.7
-Small Inst. Trades[1/]	4.7	3.8
-Corporate Buyback[2/]	0.8	3.5
Adjusted Retail Activity	74.6	58.9
% of Total	**19.7%**	**18.2%**
Institutional Activity	155.4	125.6
+ Dividend Capture	12.6	32.8
+ Program Trading	16.9	14.5
+ Small Inst. Trades	4.7	3.8
Adjusted Institutional Activity	189.6	176.7
% of Total	**50.1%**	**54.6%**
Member Trading	100.2	73.6
+ Program Trading	13.2	11.2
Adjusted Member Trading	113.4	84.8
% of Total	**30.0%**	**26.2%**

1/Small institutional trades not clearing through DTC's ID system (an estimated 3% of institutional activity).

2/Estimates based on Salomon Brothers' data.

Results of our adjusted figures follow, with the corresponding unadjusted numbers in parenthesis:

Proportion of NYSE *Publicly* Traded Share Volume

	Professional Institution	*Retail*
1988	73.9% (50.2%)	24.6% (49.8%)
1987	71.5 (55.9)	28.2 (44.1)

Proportion of *Total* Share Volume

	Professional Institution	*Retail*	*Member Trading*
1988	54.6% (38.8%)	18.2% (38.5%)	26.2% (22.7%)
1987	50.1 (41.1)	19.7 (32.5)	30.0 (26.5)

On an intuitive basis, these figures seem to reflect a more accurate indication of retail activity.

Stock Market Participation: American As Apple Pie?

Many market observers, professional and non-professional, continue to use NYSE reported share volume as a benchmark indicator of securities industry (and even economic) health. While this may once have been a key indicator, we submit that continued reliance on volume, without looking at the make-up of such volume, leads one to faulty conclusions. Indeed, when one examines reported volume carefully, trading strategies dependent on arbitrage opportunities, often executed by the larger firms, have over time become an increasingly large part of volume. In addition, dividend programs and corporate buybacks have also led to increases in reported volume. Not only are these strategies limited to professionals, but they generate relatively little income for securities firms. On the other hand, trading on fundamental stock analysis must seem nostalgic to some brokers.[2/]

So, traditional methods of correlating increasing turnover rate with stock market profitability is no longer a sure bet. That is, one must not assume an increase in volume is due to an increase in public participation.

---

2 We are not questioning the value of trading strategies, just their impact on analyzing NYSE volume.

For instance, during 1987 and 1988 reported volume in the securities industry greatly exceed "real volume"; that is, volume which excludes trading strategies. As the graph below indicates, the disparity between reported and "real volume" is fairly significant. More to the point, "real volume" is well below post-crash levels, while reported volume continued strong, even exceeding post-crash levels, for half of 1988. Disturbingly, the retail investor's confidence in the equity market has yet to recover from the crash.

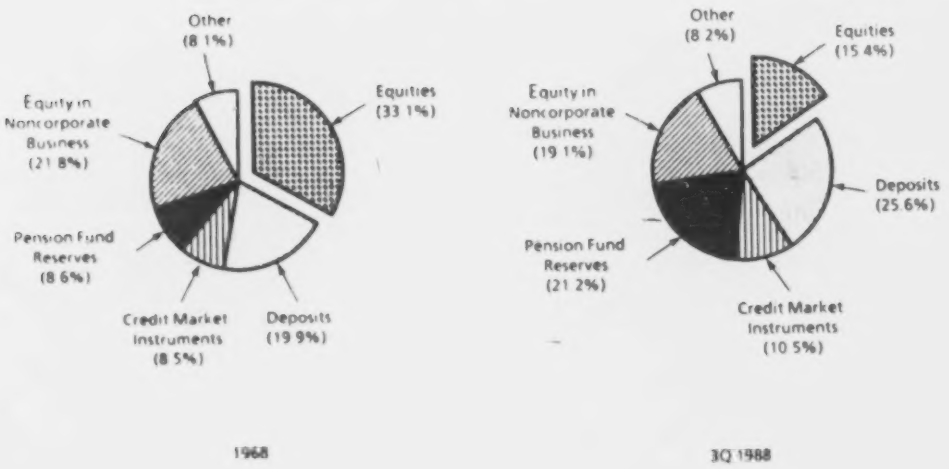
Comparison of Reported vs. "Real" NYSE Average Daily Share Volume

The shock suffered by many investors merely reinforced a trend which has developed over the past twenty years: there has been a sea change in the individuals' appetite for equities. Higher real interest rates, more perceived risk and higher taxes have blunted incentives to purchase equities directly and made other financial assets relatively more attractive. From a 82.2% share in 1968, individuals held 58.5% of all outstanding equities as of September 30, 1988.

Holdings of U.S. Corporate Equities

Further, individuals have significantly increased their holdings of other financial assets. Alas, equities have shrunk from 33.1% to 15.4% of all financial assets held by individuals.

Distribution of Retail's Financial Assets



However, statistically reporting the demise of the retail investor should be more than an academic exercise. Certainly, the retail investor adds stability to the market by taking a longer term approach to investing than non-retail investors; and corporate management certainly appreciates this approach.

But, perhaps more importantly, the ownership of equity by the individual is a core ingredient of U.S. style democracy. The point being, the individual is willing to commit funds to equities, if he believes that he has a fair chance of realizing an adequate return. For the individual to own a piece of America is a statement, of not only his faith in the system, but that he believes in its preservation. The declining participation in the equity marketplace is something for all of us to be concerned about. Reversing this trend should be an important goal and merits deliberate, thoughtful policies (tax and otherwise) to achieve it.

Grace Toto
Research Associate

David G. Strongin
Director,
International Finance

UNDERWRITING

	JAN 1989	JAN 1988	% Change 1989-1988
CORPORATE FINANCING (Gross New Issues - $ Mils)			
TOTAL	$19,470.8	$19,299.4	0.9%
Common Stock	$1,674.2	$979.9	70.9%
# of Common Stock Issues	17	17	0.0%
Preferred Stock	$325.0	$1,068.0	-69.6%
# of Preferred Stock Issues	6	17	-64.7%
Corporate Debt	$17,471.6	$17,251.5	1.3%
# of Corporate Debt Issues	206	251	-17.9%
MUNICIPAL FINANCING (Gross New Issues - $ Mils)			
Negotiated	$5,308.1	$4,991.4	6.3%
# of Issues	157	219	-28.3%
Competitive	$1,881.5	$1,893.7	-0.6%
# of Issues	263	274	-4.0%

Source: IDD Information Services

VOLUME

	DEC 1988	YTD 1988	DEC 1987	YTD 1987	% CHAN YTD 1988-1987
AVERAGE DAILY SHARE VOLUME ON					
NYSE (MILS.)*	135.5	161.5	178.5	188.7	-14.4%
AMEX (MILS.)*	11.1	10.0	13.4	13.9	-28.0%
NASDAQ (MILS.)*	118.5	122.8	135.1	149.6	-18.0%
REGIONAL EXCHANGE (MILS.)*	N/A	N/A	30.9	27.9	N/A
DOLLAR VALUE OF SHARES TRADED ON					
NYSE (MILS.)	$91,202	$1,356,051	$114,214	$1,873,598	-27.6%
AMEX (MILS.)	1,382	30,848	2,784	51,137	-39.7%
ODD-LOT SHARES PURCHASED ON NYSE (THOUS.)	7,281	86,310	8,665	132,756	-35.0%
ODD-LOT SHARES SOLD (INCLUDING SHORT SALES) ON NYSE (THOUS.)	16,497	181,894	17,155	208,782	-12.9%
NYSE BLOCK VOLUME AS A PERCENT OF TOTAL SHARES TRADED	51.1%	52.7%	48.9%	51.2%	----
CONTRACTS TRADED (THOUS.)					
CBOE OPTIONS	8,305	111,784	8,998	182,114	-38.6%
AMEX OPTIONS	2,629	37,470	2,916	52,771	-29.0%
COMMODITY	18,494	245,885	16,656	228,795	7.5%

*MONTHLY AVERAGE
N/A - DATA NOT AVAILABLE

YIELDS

(MONTHLY AVERAGES)

	NOV 1988	NOV 1987	BASIS POINT CHG 1988-1987
BOND BUYER INDEX (20 BOND)	7.46%	7.95%	(49)
CORPORATE BOND YIELDS (MOODY'S)			
Aaa CORPORATE	9.45	10.01	(56)
Baa CORPORATE	10.48	11.23	(75)
RATIO Aaa CORPS. TO Baa CORPS.	0.90	0.89	1

PRICES

(END OF MONTH)

	JAN 1989	JAN 1988	% CHAN JAN 1989-1988
DOW JONES INDUSTRIALS	2342.32	1958.22	19.61%
STANDARD & POOR'S 500	297.47	257.07	15.72%
NYSE COMPOSITE	166.63	144.13	15.61%
AMEX MARKET VALUE INDEX	323.02	269.10	20.04%
VALUE LINE COMPOSITE	244.16	210.73	15.86%
NASDAQ COMPOSITE	401.30	344.66	16.43%